

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

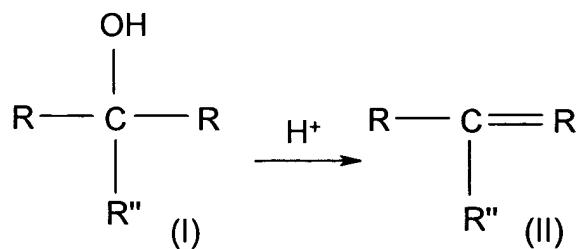
1-22. (Cancelled)

23. (New) A breath testing device comprising nanoparticles and a visual indicating agent that is color sensitive to at least one odorous compound present in the breath of a user.

24. (New) The breath testing device of claim 23, wherein the odorous compound contains sulfur.

25. (New) The breath testing device of claim 23, wherein the odorous compound contains an amine.

26. (New) The breath testing device of claim 23, wherein the visual indicating agent contains a dye having the general formula (I) or (II):



where,

R is H, $(\text{NH}_2)\text{C}_6\text{H}_5-$, or C_6H_5- ;

R' is $(\text{CH}_3)_2\text{NC}_6\text{H}_5-$, $(\text{NH}_2)\text{C}_6\text{H}_5-$, $(\text{CH}_3)\text{C}_{10}\text{H}_6(\text{OH})-$, or $(\text{NaCO}_2)(\text{CH}_3)\text{C}_{10}\text{H}_5(\text{OH})-$;

and

R'' is $(\text{CH}_3)_2\text{NC}_6\text{H}_5-$, $(\text{NH}_2)\text{C}_6\text{H}_5-$, $(\text{CH}_2)\text{C}_{10}\text{H}_6\text{O}-$, or $(\text{NaCO}_2)(\text{CH}_2)\text{C}_{10}\text{H}_5\text{O}-$.

27. (New) The breath testing device of claim 23, wherein the visual indicating agent contains pararosaniline base, alpha-naphtholbenzein, napthochrome green, or combinations thereof.

28. (New) The breath testing device of claim 23, wherein the visual indicating agent contains 4,4'- bis(dimethylamino)-benzhydrol.

29. (New) The breath testing device of claim 23, wherein the nanoparticles have an average size of less than about 100 nanometers.

30. (New) The breath testing device of claim 23, wherein the nanoparticles have an average size of from about 1 to about 50 nanometers.

31. (New) The breath testing device of claim 23, wherein the nanoparticles have a surface area of from about 50 to about 1000 square meters per gram.

32. (New) The breath testing device of claim 23, wherein the nanoparticles have an average size of from about 100 to about 600 square meters per gram.

33. (New) The breath testing device of claim 23, wherein the nanoparticles include silica, alumina, or combinations thereof.

34. (New) The breath testing device of claim 23, wherein the visual indicating agent is contained on a substrate.

35. (New) The breath testing device of claim 34, wherein the substrate contains a fibrous material.

36. (New) The breath testing device of claim 35, wherein the fibrous material contains cellulosic fibers.

37. (New) The breath testing device of claim 34, wherein the substrate is located within a passage of a carrier portion.

38. (New) The breath testing device of claim 34, wherein the substrate covers an end of a carrier portion.

39. (New) The breath testing device of claim 34, wherein the visual indicating agent is applied to the substrate as a solution.

40. (New) The breath testing device of claim 39, wherein the concentration of the visual indicating agent is from about 0.001 to about 15% wt/wt.

41. (New) The breath testing device of claim 39, wherein the concentration of the visual indicating agent is from about 0.005 to about 2% wt/wt.

42. (New) The breath testing device of claim 23, further comprising a zone having a reference color, the reference color being the color to which the indicating agent will change upon exposure to the odorous compound.

43. (New) A dispenser containing the breath testing device of claim 1.

44. (New) The dispenser of claim 43, further comprising at least one breath freshener.

45. (New) The dispenser of claim 44, wherein the breath testing device and breath freshener are contained in different compartments of the dispenser.

46. (New) A breath testing device comprising a carrier portion defining a passage that is open at least one end, wherein the device contains nanoparticles and a visual indicating agent that is color sensitive to at least one odorous compound present in the breath of a user.

47. (New) The breath testing device of claim 46, wherein the carrier portion is a cylindrical structure.

48. (New) The breath testing device of claim 46, wherein the carrier portion is substantially flattened.

49. (New) A method for testing for bad breath in a user, the method comprising:
causing the user to blow or breathe onto or into a carrier portion of a breath testing device, the breath testing device containing nanoparticles and a visual indicating agent that is sensitive to at least one odorous compound; and
observing whether the visual indicating agent changes color.